DETAILED ACTION

1.   Previous Non-Final Office Action dated (12-04-2008) is being withdrawn in view of the

Non-Final Office action submitted herewith. A 1 MONTH EXPIRATION PERIOD IS SET

FROM THE MAILING DATE OF THIS COMMUNICATION.

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 9/24/2008 has been entered.

Response to Amendment

3.   It is acknowledged that claims 1 and 12-14 have been amended.

4.   Claims 1-14 are pending.

Response to Arguments

5.   On page 8 of Applicant's Remarks, Applicant indicates that the "computer-readable

medium" is described at least on page 20 of the specifications as "a magnetic storage device,

optical disc, magnetic optical storage medium, semiconductor memory or the like." Which

provides proper definition that places the claim within one statutory class of invention, therefore

the rejection of claim 13 under 35 USC 101, and the objection to the specifications are

withdrawn.

6.   Applicant's arguments with respect to claims 1 have been fully considered but are moot

in view of new grounds of rejection.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

8.   Claim 1-11 refers to "an information processing apparatus" but fails to specifically

disclose to be a part of a physical device (such as consisting of a processor or physical memory)

and to one of ordinary skill can be implemented as software routines. Claim 1 refers to "means

for transmitting, receiving, storing, outputting, detecting, and claim 10 refers to "reproduction

unit" all of which fails to specifically disclose to be a part of a physical device. Therefore

renders the system at most software per se, failing to fall within a statutory category.

        Accordingly the claims lack the necessary physical articles or objects to constitute a

machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of

steps or acts to be a process nor are they a combination of chemical compounds to be a

composition of matter. As such, they fail to fall within a statutory category. They are, at best,

functional descriptive material *per se*.

        Descriptive material can be characterized as either "functional descriptive material" or

"nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when

claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When <u>functional</u>

descriptive material is recorded on some computer-readable medium, it becomes structurally and

functionally interrelated to the medium and will be statutory in most cases since use of

technology permits the function of the descriptive material to be realized. Compare *In re Lowry*,

32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming <u>non</u>functional descriptive material, i.e., abstract ideas, stored on a

computer-readable medium, in a computer, or on an electromagnetic carrier signal, do not make

it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an

algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application

of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

10.   Claims 1-14 rejected under 35 U.S.C. 103(a) as being unpatentable over **Craig et al. (US

6757708 B1)** (herein referenced as **Craig**) in view of **Tso et al. (US 6681298 B1)** (herein

referenced as **Tso**).

As per claim 1, Craig discloses:

- **means for transmitting a request for a page information to said external apparatus,**

  at least by (col. 11 lines 16-17, Fig. 4) "A request 405 for dynamic generated content is

  received at Web server 410", where the request and receiving of the content is

  transmitting, and the web server is the external apparatus.

- **means for receiving said page information, wherein the page information includes**

  an identification information corresponding to a content data, and receiving said

  content data corresponding to said identification information included in said page

information, at least by (col. 11 lines 17-21) where it is disclosed that the received request via HTTP is forwarded to a web application server that supports JSPs and servlets, then the "request is then passed to a servlet 420 corresponding to the invoked JSP, where this servlet 420 uses a bean 425". It is known in the art and further disclosed in (col. 12-13) that beans refers to the dynamic content that is generated and the status of the beans by the methods defined within the bean so the disclosed bean and the methods related to versions ("serialVersionUID") and cashed information ("amICached") bean etc., are the identification information corresponding to the content data.

- **means for storing said content data received by said means for receiving, based on said identification information independently of said page information**, at least by (fig. 6-9) discloses the process of caching based on the condition of the bean and whether it has been cached or out of date. This is done independently of the page information because the "executed methods" pertaining to the identification information are defined within the bean.

- **means for outputting the said content data along with said page information**, at least by (Fig. 3A ref. 310b, col. 9 lines 38-40) "FIG. 3B shows that the JSP 355 sets and gets 360, 361 information from each bean 365, 366, where this information may be a result of the bean retrieving 370, 371 information from the data store 375, 376. Once the dynamically generated response is complete, it is returned 310b from the JSP 355 to the browser 305."

- **means for detecting whether said content data corresponding to said identification information acquisition request is stored in said means for storing,** at least by (Fig. 6 ref 600),

- **But Craig fails to specifically disclose:**

    o **(a) and for controlling said means for outputting to output said content data stored by said means for storing without inquiry via the network when said content data is stored in said means for storing.**

    o **(b) and for controlling said means for receiving to receive by said content data from the external apparatus via the network when said content data is not stored in said means for storing.**

However, **Tso** teaches the above limitations **(a)** at least by **(**col. 4 lines 27-30) Craig discloses "If the web page exists in the cache 164, control continues with step 212. Control outputs the web page to the display 30 and continues with step 204." Where if the page is in the cache, (the cache is claimed means for storing) the page is retrieved and displayed from the cache which is local at the set top box therefore an inquiry via the network is not necessary. And Tso further teaches limitation **(b)** at least by **(**col. 4 lines 32-37) Craig discloses "if the web page is not dynamically generated and the web page does not exist in cache, control continues from step 208 to step 216. In step 216, control retrieves the requested web page from the web server 14 using the URL." Where if the page does not exit in the cache, (the cache is claimed means for storing) the page is retrieved from the web server using the URL with is the external apparatus via the network claimed.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of

the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of

the ordinary skill in the art would have been motivated to use such a modification for the purpose

of allowing the ability to define a preference in what the user wants cached which allows more

freedom and customization in how the memory and resources should be used.

As per claim 2, claim 14 is incorporated and further Craig discloses:

- **wherein said controller stores in said memory the content data corresponding to the
  content data acquisition request included in said page information,** at least by (Fig. 6
  ref 600) and further (Fig. 4 ref 430) is claimed memory.

As per claim 3, claim 2 is incorporated and further Craig fails to specifically disclose:

- **wherein said controller stores in said memory an image data associated with page
  information of a portal site.**

However, **Tso** teaches the above limitations at least by (col. 3 lines 62-63), as "Cache items

include web pages or HTML documents that include HTML text plus **images,** audio."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the

invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the

ordinary skill in the art would have been motivated to use such a modification for the purpose of

being able to cache media that requires more bandwidth and resources for improved browsing

and accessibility.

As per claim 4, claim 2 is incorporated and further Craig fails to specifically disclose:

- **wherein said controller stores in said memory a sound data associated with page
  information of a portal site.**

However, **Tso** teaches the above limitations at least by (col. 3 lines 62-63), as "Cache items include web pages or HTML documents that include HTML text plus images, **audio**."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of being able to cache media that requires more bandwidth and resources for improved browsing and accessibility.

As per claim 5, claim 14 is incorporated and further Craig fails to specifically disclose:

- **wherein said controller stores in said memory the content data that has been accessed more than a certain number of times.**

However, **Tso** teaches the above limitations at least by (Fig. 7A, Ref. 410) shows the cache with a count of number "times used."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of filtering out the least viewed content to optimize the usage of memory and resources.

As per claim 6, claim 14 is incorporated and further Craig fails to specifically disclose:

- **wherein said controller removes from said storage means memory the content data that has been infrequently accessed.**

However, **Tso** teaches the above limitations at least by (col. 5 lines 4-8), as "control deletes the web page with the lowest removal factor and returns to step 252. Control also preferably removes web pages that were preloaded when the deleted web page was initially loaded."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of Tso into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of filtering out the least viewed content to optimize the usage of memory and resources.

As per claim 7, claim 6 is incorporated and further Craig fails to specifically disclose:

- **wherein said controller registers in said memory an indicator showing importance of said content data along with said content data, and prevents said content data from being removed based on said indicator of said content data regardless of a frequency of playback access of said content data.**

However, **Tso** teaches the above limitations at least by (col. 5 lines 4-5) as "control deletes the web page with the lowest removal factor and returns to step 252" where removal factor is based on (col. 7 lines 65 – col. 8 lines 3) "function F that depends on one or more of the usage and/or data type factors for each cache item" where because the removal factor is based on one or more of the usage and/or data type the removal of the item can be prevented regardless of the frequency of the page accessed.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of allowing the ability to define a preference in what the user wants cached which allows more freedom and customization in how the memory and resources should be used.

As per claim 8, claim 14 is incorporated and further Craig fails to specifically disclose:

- **wherein, when said controller receives compressed content data from said external apparatus, said controller registers in said memory said content data in uncompressed format.**

However, **Tso** teaches the above limitations at least by (col. 6 lines 23-24), as "indicates whether the cache item is compressed ("C") or decompressed ("D")," which shows that both compress and uncompressed data can be stored.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of storing the content is its original form which then improves the content retrieval time.

As per claim 9, claim 8 is incorporated and further Craig fails to specifically disclose:

- **wherein, when said controller receives the compressed content data with a certain attribute, said controller registers in said means memory said content data in uncompressed format.**

However, **Tso** teaches the above limitations at least by (col. 6 lines 23-24), as "indicates whether the cache item is compressed ("C") or decompressed ("D")," where ("C") and ("D") are claimed attribute.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of storing the content is its original form which then improves the content retrieval time.

As per claim 10, claim 14 is incorporated and further Craig fails to specifically disclose:

- **wherein: said receiver includes a content reproduction unit configured to reproduce the content data received; and said controller converts the content data received from said external apparatus into a compression format corresponding to characteristics of said content reproduction means unit, and then stores said content data in said memory.**

However, **Tso** teaches the above limitations at least by (col. 4 lines 29), as "control continues with step 212. Control outputs the web page to the display 30 and continues with step 204" and (col. 4 lines 44-45) as ," control stores the web page in cache and outputs the web page to the display 30 in step 256" show reproducing stored content and (col. 6 lines 23-24), as "indicates whether the cache item is compressed ("C") or decompressed ("D") show the ability to reproduce compressed data.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of optimizing the storage space by storing the compressed data.

As per claim 11, claim 14 is incorporated and further Craig discloses:

- **wherein: the page information received by said receiver includes said content data acquisition request and Uniform Resource Locator (URL),** at least by (Fig. 4 Ref. 405) it should be understood the an HTTP req includes a url. And at least by (col. 11 lines 17-21) where it is disclosed that the received request via HTTP is forwarded to a web application server that supports JSPs and servlets, then the "request is then passed to

a servlet 420 corresponding to the invoked JSP, where this servlet 420 uses a bean 425",

where the bean is the content data being requested.

- **and said controller accesses, when the content data corresponding to said content data acquisition request is not stored in said memory, said URL to acquire said content data from said external apparatus,** at least by (Fig. 7 Ref 715 and 725) shows the instance where the bean is not cached the "CS returns NULL to EM" which lead to the determination of caching in (Fig.9).

Claim 12 is an information reproduction method corresponding to the apparatus claim 1, and is rejected under the same reason set forth in connection to rejection of claim 1 above.

Claim 13 is a program product claim corresponding to the apparatus claim 1, and is rejected under the same reason set forth in connection to rejection of claim 1 above. Where **Craig** further discloses the program product stored upon a computer readable medium to be processed, at least by (Claim 35).

Claim 14 is an information reproduction apparatus corresponding to the apparatus claim 1, and is rejected under the same reason set forth in connection to rejection of claim 1 above. Where **Craig** further discloses the apparatus as (Fig. 1 and Fig. 2) which is used to provide the means that has been disclosed in claim 1.

Conclusion

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS TRUONG whose telephone number is (571)270-3157. The examiner can normally be reached on MON - FRI: 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mahmoudi Tony can be reached on (571) 272-4078. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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/Dennis Truong/
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